1 Interview Summaries

1.1 Maine State Planning Office (SPO)

Interview Type	Personal, State Agency
Interview Location	SPO, 184 State Street, Augusta
Interview Date	October 24, 2001
Summary Date	December 07, 2001
Interviewer	AGI / Richard Sutton (rs@appgeo.com)
Interviewed:	MaryAnn Hayes, SPO Land Use Team maryann.hayes@state.me.us Matt Nazar, SPO Land Use Team matthew.nazar@state.me.us Richard Kelly, Jr., Coastal, dick.Kelly@state.me.us Elizabeth Hertz, Coastal/Wetlands Elizabeth.hertz@state.me.us Hank Tyler, Recycling Josie Quintrell Coastal josie.quintrell@state.me.us
Staff Size (approx)	58
Budget (approx)	$13.5 Million
URL:	http://www.state.me.us/spo/

1.1.1 Agency Overview

The Maine State Planning Office provides the information, analysis and guidance for supporting informed decision making about Maine's economy, resources and governance. The Maine SPO is statutorily mandated (5 MRSA § 3305) to

- Coordinate development of the state's economy and energy resources with conservation of its natural resources
- Provide technical assistance to the Governor and the Legislature
- Provide technical assistance local and regional planning groups
- Conduct continuing economic analyses, including economic forecasting

SPO is administered through the following seven teams (the first five are policy units; the final two are management units):

- Land Use Planning team: Community planning and investment program, comprehensive planning, municipal planning assistance and Smart Growth
- Eco-Eco team: Natural Resource Policy & Energy, Land & Water Resources Council, land for Maine's future Program, Maine Coastal Program, energy planning energy conservation program and nuclear safety advice
- Economics and Demographics team: Economic and Demographic data: economic forecasting, revenue forecasting, MaineGraph, Census data and impact analyses
- Community Assistance team: provides technical assistance for code enforcement training and certification, the floodplain management program and the waste management and recycling program
- Community Service team: Maine Commission of Community Service: National Service programs, AmeriCorps, Maine Service Exchange, Maine's Promise.
- Directors team: Policy & Administration: overall management, legislative liaison and special projects such as research and development, East-West Highway study, strategic planning and performance budgeting.

- Management & Support team: accounting, budgeting, information systems, finance and personnel.

1.1.2 GIS Initiatives

1.1.2.1 Overview of GIS Utilization

All four of the State Planning Office's statutory obligations and 6 of the 7 organizational teams would benefit significantly from accessible GIS data and analysis, yet SPO has only minimal in-house GIS capability.

The primary GIS user and data administrator is Dick Kelly. He is a GIS veteran who is proficient with command line ArcInfo but uninterested in migrating to the new Arc8 environment. He is well known throughout state agencies and conservation organizations as the creator of numerous well designed useful cartographic products, and primary curator of the state conservation lands layer. Additionally Eric Von Magnus uses ArcView for US Census analysis and visualization, and a small number of other users occasionally dabble in this environment.

1.1.2.2 GIS Operating Environment and Infrastructure

The Maine SPO currently maintains a single ArcInfo seat and a small number of ArcView licenses. GIS software is also accessible via Citrix served from MeGIS. There is large format plotter (HP750C) available, but it is not accessible through the local network. Much of the ArcInfo work is undertaken by Dick Kelly physically working from MeGIS, where technical assistance is more accessible.

1.1.2.3 GIS Data Resources and Requirements

1.1.2.3.1 Spatial Data

The Maine SPO is a potential creator and curator of numerous data layers, but is currently actively maintaining very few. These include

- Municipal recycling data (in close coordination with Larry Harwood at Maine OGIS)
- Conservation lands data: The definitive conservation lands layer has been maintained and updated in recent years by Dick Kelly at SPO. This layer was first created in the early 1990's at 1:250K scale, then recompiled to 1:100K and digitized at the University of Maine at Orono as part of the GAP project. It has been enhanced incrementally in subsequent years with 1:24K scale data in cooperation with the Department of Conservation's Bureau of Parks & Lands and Inland Fisheries & Wildlife.

Existing data sets include:

Numerous statewide characterization maps for reporting purposes, covering such content as Service Center areas, demographics and economic characteristics of the state are created on an ad hoc basis. These are often very informative and products, but aren't archived in any systematic way.

Basemap features:
SPO uses MeGIS base data.

Analysis layers, including:
- Conservation lands layer: includes federal, state and major private holdings as well as municipal properties in major cities. Dick Kelly will begin updating this layer in early 2002 under funding provided by the State Comprehensive Outdoor Recreation Plan (SCORP) under the Bureau of Parks and Lands within the Department of Conservation.
- Recycling information (regions, incinerator locations, recycling centers) linked to municipalities and maintained in close collaboration with MeGIS

Currently unavailable but desired data sets include:
- Accessible existing Maine OGIS datalayers
- Land Use
- Parcels
- Conservation lands
- Accurate wetlands
- Soils
- Slopes
- Shoreland zoning
- Special use overlays
- Accurate flood hazard areas
- Tax Increment Financing districts
- Business and industrial parks

1.1.2.3.2 Attribute Data

The SPO Land Use team is currently loading statewide policy analysis data into a Microsoft Access-based system for tracking a wide array of municipal characteristics. There is no existing strategy for map-enabling these data, though SPO is strongly in favor of this for analysis purposes.

1.1.2.3.3 Data Issues

- Too difficult to access and utilize necessary data from Maine Office of GIS. These data are not set up for easy use with regional databases. The tiling schemes and naming conventions seriously inhibit utility.
- Data developed as part of SPO funded growth and comprehensive planning process are not being collected in a coordinated and reusable way.
- SPO would be completely comfortable with MeGIS hosting their data if it were well managed and available.

1.1.2.4 GIS Applications and Application Requirements

Currently Maine SPO operates no project specific, in-house GIS applications. The best current example of SPO-MeGIS cooperation is the recycling maps effort. Hank Tyler maintains an attractive and effective set of maps for the Recycling program, but the production of these is facilitated by Larry Harwood at MeGIS. This requires Hank to physically visit Larry at the MeGIS office and work out map production details whenever substantive updates to the maps are required. It is a very satisfactory relationship producing high quality output, but it is not a solution that will scale easily to other applications.

Dick Kelly also works from MeGIS when producing certain mapping products, as this is the sole location for large format plotting and a source of quality technical assistance. One of the primary applications he runs from here is a large format Wetlands Inventory atlas. This is produced using ArcInfo AML and includes E911 roads, enhanced National Wetlands Inventory layers and MeGIS base data. These maps are provided to towns as requested for planning purposes.

The State Planning Office has collaborated with NOAA, The Island Institute, MeGIS, the Atlantic Salmon Commission, DMR, US Fish and Wildlife Service and others to produce The Maine Project: http://www.csc.noaa.gov/products/maine/html/partners.htm . This is an interactive CD-ROM product that provides landuse and associated data for Maine coast and significant inland areas as well as Web-served mapping data for viewing landcover of individual municipalities.

Planned future GIS activity and applications:.

- Sensitive Habitat Measurement web application: SPO is collaborating with the Maine Natural Areas Program, the Department of Inland Fisheries and Wildlife, the Maine Coast Heritage Trust, Maine Audubon, the US Fish and Wildlife Service, the Wells Reserve and the Southern Maine Regional Planning Commission to track detailed information about the location and importance of rare and significant plant and wildlife habitats. The objective of this effort is to provide land trusts and local communities in southern and midcoast Maine with this critical data to inform planning and protection efforts. At present there are nearly a dozen land trusts and towns involved in this effort, and this number is expected to double within the next year. An Internet mapping application to consolidate and serve this data would be extremely valuable, and SPO is seeking to cooperate with project participants to deploy such a tool.
- Uniform and standardized comprehensive mapping tool
- Application support for numerous SPO programs including Natural Resource Policy and Energy, Maine Coastal Program, Energy Planning, Economic and Demographic forecasting, Recycling Program and community Service
- SPO maintains a tabular data viewing application for Lotus 123 and MS Excel (MaineGraph) that permits the user to investigate hundreds of data variables describing the Maine economy. Map-enabling this and providing it via a Web

browser would open up tremendous public access to SPO data resources. Along these lines a project named PAT is being initiated through which SPO is looking to enhance its website to better provide information and analyses to decision-makers about natural resources, economy, and governance. PAT will develop guidelines to govern the design and maintenance of SPO's website, including funding strategies, and should include mapping capabilities to augment other analysis components. PAT is reportedly launching in late December, 2001.

1.1.3 Other Relevant Issues

- Presentation Mapping is a critical function of the State Planning Office. This is largely accomplished by Dick Kelly with strong assistance from MeGIS. Higher level GIS functions and applications are not available at SPO.

1.1.4 Major Benefits and Cost Justification

- SPO should be fully spatially enabled as an organization. Anyone performing data analysis should have access to the applications and data allowing meaningful geographic interpretation of these data. Specifically, there should be functional familiarity with GIS in each of the five SPO policy teams.
- Greater care taken in storage and indexing of the SPO mapping products that have been created will eliminate duplication of effort and provide a valuable archival resource.
- SPO's spatial data acquisition and analysis efforts must not be wasted through loss or duplication of data. SPO (Mary Ann Hayes) offers the following summary of such inefficiencies in its Growth Management Program since 1989:
    - About 400 planning grants were awarded and an average of $3000 was spent on each - more where a digital parcel layer was created and more still in the few towns that actually used the opportunity to establish a GIS. Total: $1.2 million.
    - SPO has awarded about 225 implementation grants. Here an average of $500 has been spent on refining the land use plan from the comprehensive plan to a full zoning map (less if parcel layer already complete). Total: $100,000.
    - In addition, a number of digital parcel layers were created that may or not be GIS-ready and may or not be integrated with how the town manages its tax map system.
    - In the GPCOG region especially, work has been done to build an integrated regional GIS system and to get the towns into GIS. In Northern Maine, since NMDC does most of the work, there is more compatibility among town data layers and ability to analyze. This itemization does not include additional resources devoted to these and similar efforts from other organizations. Throughout most of the rest of the state, growth management planning data is a total hodge-podge.

- In numerous areas, mapping work has been donated by USM, College of the Atlantic and others. Similar and sometimes identical work has been undertaken by state agencies, and cases have occurred where towns themselves have paid to have the work done, unaware of its existence. All this has been undertaken without coordination or under a common system, so is inadequately documented, inaccessible, and generally a poorly utilized investment.
- Total expenditures over the decade on this program are conservatively estimated at $1,500,000. SPO is unable to use these data for systematic analysis or compile regional data from them. A similar investment in reusable data and accessible technology could provide practical GIS growth management tools over a majority of Maine.